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DIVIDEND ANNOUNCEMENTS IMPACT ON STOCK RETURNS: EVIDENCE FROM THE EMERGING MARKET OF INDIA

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Abstract: This article presents the results of an empirical study of the impact of dividends announcements on the Indian companies' stock returns. Interest in the Indian stock market is due to the fact that today it is one of the largest and fastest growing markets. The research method used to measure the market reaction to announcements of dividend payments, is the event study analysis. The study was conducted on a sample of Indian companies whose shares are actively traded on the Bombay Stock Exchange in the period 2010 to 2012. The results obtained allow concluding that the Indian market, on average, reacts positively on the announcement of the increased dividend amount, reacts negatively to the announcement of the reduced amount of dividends and does not react on the announcement about the dividend amount unchanged.

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Introduction

The primary goal of financial management is to maximize company's market value and shareholders' wealth. One of the most complicated tasks is the decision-making on free cash flow (FCF) distribution. To determine the proportions of FCF allocated for investments, payments to creditors, and dividends, the company should take into account a number of internal and external factors. As the decisions on dividend policies have their impact on public traded companies, it is important for such companies to reveal the investors' reaction to dividend announcements. In this paper the authors present the first results for such study on the example of emerging, namely Indian, capital market. These results can be used by companies' management for the development and improvement of the dividend policies, and to determine the criteria of profit and cash flow distribution.

The studies of emerging markets are now an acute topic as these economies demonstrate fast growth which includes the development of financial markets. In this respect, it is very important to determine the potential growth drivers. This research is focused on the stock market and the investors' reaction to dividend announcements. The broad research program aims to research and compare dividend policies and stock market behavior in a number of emerging countries (including Russian market). This program is started with the study of the Indian market. The Indian stock market is among the most dynamically growing markets of emerging economies. In 2003-2012, the turnover on Indian stock exchanges rose by 15% annually, on the average, despite some decrease observed during the period of the global financial crisis. In 2011, India was the world's 11th largest market in terms of market capitalization. Among emerging countries, only China, Hong Kong, and South Korea were ahead of India as regards this indicator (Indian Securities Market, a Review).

Investors in the stock market have different attitudes towards the future dividend payments and associated uncertainty. Due to the existing information asymmetry, managers have more information on the company's prospects than shareholders (Miller, Rock, 1985). The history of stock market demonstrates that the increase in dividends is often accompanied by rising stock prices and, vice versa, the stock prices go down when dividend payments decrease. There is a widespread idea that investors prefer dividends to capital gains (Jensen, 1986; Woolridge, Ghosh, 2002). According to the Modigliani-Miller dividend irrelevance theory (Miller, Modigliani, 1961), the firm's value is determined by asset performance, by its capability to generate earnings and does not depend upon the distribution

between dividends and retained earnings.

The investors' reaction to the change of the dividend policies does not necessarily show that investors give preference to dividends over retained earnings. However, changes in stock prices following the dividend announcements provide evidence that the latter contain important information, i.e. have a signaling effect.

The signaling theory states that dividends are perceived by investors as a signal of future earnings expected by company top-managers. The assumption of signaling theory is that dividend policies of a company influence the stock returns and hence the shareholder value (Easterbrook, 1984). There is a number of academic papers dedicated to studying this issue in developed markets, and namely, USA ((Aharony, Swary, 1980; Karim, 2010)), Denmark ((Sorensen, Arveschoug, 2004), UK ((Karim, 2010; Vieira, 2011))). At the same time, the reaction of emerging markets to companies' dividend announcements has not been sufficiently investigated yet. This paper is devoted to testing the assumptions of signal theory on Indian market. Despite the dynamic growth of the Indian stock market and its solid positions in terms of market capitalization, the results of the previous research of Indian companies (e.g. (Teplova, 2008; Mallikarjunappa, Manjunatha, 2009; Taneem, Ryerson, 2011; Sharma, 2011)) are ambiguous. So, additional studies within this area can contribute to better understanding of the topic. If a significant market reaction to dividend announcements is confirmed, companies will have to take into account when making decisions on profit distribution in order to maximize the shareholders' value.

Research Problem and Literature Review

Free cash flow (FCF) of a company is one of the most important financial indicators that informs investors when making investment decisions. However, when analyzing this indicator, one should be cautious because its dynamics is more meaningful than its absolute value. A negative FCF does not necessarily contain negative information for investors: it can signal about growing investment capabilities of the company or necessity to invest in projects that will bring profit to the shareholders in the future.

In this respect, a question arises as to how investors should react to the dividend announcements, i.e. to the one possible way of FCF distribution. Will be the reaction of market player on such information unambiguous? The dividend signaling theory tries to answer that question. According to the theory, dividends are a signal on company's cash flows and earnings expected in the nearest future. However, real data often contradicts such

interpretation. In 2012, the stock prices of American high-tech companies Dell and SAIC declined sharply following the companies' announcements of record dividend payouts. Investors interpreted this announcement both as a signal of lack of profitable technological investments opportunities and a signal of the slowdown of the industry growth. As a result the price of Dell stock fell by 11% and the price of SAIC by 6.9% while the stock prices of competitors that announced stable dividends rose by 9% on the average (Record dividends of high-tech companies…). This example shows that the market reaction may be different and we cannot say for sure how investors would react to different dividend announcements, even though such reaction might seem quite obvious.

From the rational investor's viewpoint the announcement of the increased dividends by Dell and SAIC could be considered as a positive signal about their business. In turn, it should have caused an increase in stock returns. However, the Boards of Directors of the aforesaid companies perhaps did not take into account the industry specifics and shareholders' expectations concerning the use of FCF when deciding on the dividend payouts. The market's reaction to substantial announcements is determined to a great extent by country-specific features (dominating ownership models, characteristics of taxation and corporate governance systems, dividend policies) and, possibly, by the specifics of the industry, in which the company operates. Therefore, in order to make reasonable managerial decisions, it is necessary to investigate the market reaction to dividend announcements and reveal the factors underlying the direction of that reaction.

A classical paper in this area is a study (Aharony, Swary, 1980). The authors used the event study analysis methodology on a sample of 149 companies listed on New York Stock Exchange (NYSE). The companies were divided into three subsamples: the first group contained companies with unchanged dividend payouts, the second one consisted of companies with increased dividends and the third subsample embraced companies that paid less in dividends. Aharony and Swary (1980) tried to link dividend announcements to earnings announcements, so each subsample was further divided into two groups. The first group included companies that disclosed their earnings before their dividend announcements; the second group followed the opposite practice and started with the announcement of dividend payout. The results showed that the announcement of unchanged dividend from last year had no impact on the company's stock price irrespective of whether it was published before or after the relevant earnings announcement. When increased dividends were announced, the market

reacted positively, which was reflected in rising stock prices. A decrease in dividend payouts gave a negative signal for the market and caused a decline in stock prices within the event window. It should be noted that in both cases of increase and decrease in dividend amounts, the price changes were practically the same for the companies that announced their dividends before or after having disclosed their earnings. Therefore, the results by (Aharony, Swary, 1980) confirmed the hypothesis that changes in dividend payouts provide some additional information to the market and represent a signal for investors, irrespective of the announcements of a company's earnings.

Another important research on the topic was (Divecha, Morse, 1983) where the reaction of the US market to dividend increases that took place after increase or decline in earnings was examined. The results obtained did not contradict the results of the above-mentioned paper. The authors stated that an increase in dividend payouts after decrease in earnings is perceived by investors more negatively than dividends rising after growth in earnings.

The paper (Benesh et al., 1984) also deals with the reaction of US market to companies' dividend announcements. Unlike (Divecha, Morse, 1983), the authors examined the market reaction not only to increased, decreased or stable dividend amounts but also to companies' first dividend payouts and decisions not to pay dividends. The results were similar to those obtained in (Aharony, Swary, 1980). It was determined that negative abnormal returns were triggered by non-distribution of dividends or decrease in dividends. In other situations, positive abnormal returns were observed. Besides, the researchers noted the following market reaction: the average abnormal returns were –9.6% in the first case and +1.4% in the second one. These results allowed them to assert that the market reaction to a negative event differs significantly from the reaction to a positive one: the absolute value of expected abnormal returns is 6.86 times higher in the case of a negative event.

The paper (Eddy, Seifert, 1992) analyzes stock price behavior dependence on simultaneous dividends and earnings announcements of American companies. The authors examined a sample of 1,111 companies actively traded on stock exchanges. The results showed that the reaction of the US market to the simultaneous announcements of dividend payouts and earnings has a significant difference from the reaction to separate announcements. The authors of the research assert that the market reaction to the combined announcement is much stronger than in cases when the announcements of dividends and earnings are isolated. In the opinion of

Eddy and Seifert (1992), this fact demonstrates that a combined announcement carries more information to the market than an isolated one. On the basis of regression analysis, the authors concluded that the reaction to a combined announcement is two times stronger than the reaction to isolated announcement. The expected abnormal returns show insignificant deviation from zero if the announcements in a pair contain opposite messages (if one announcement carries positive information while the other one gives negative information). Finally, if one of two simultaneous announcements does not carry any substantial information, the stock price behavior is determined by a non-zero signal.

Another research in the field of dividend signaling theory testing was done by T. McCluskey. In the paper (McCluskey, 2006) on a sample of Irish companies, the author analyzed the behavior of stock prices around the date of a company's dividend announcement. It is to be noted that the research covered a rather long period of time from 1987 through 2001. The sample included 50 companies traded on Dublin Stock Exchange with the overall number of 674 dividend announcements. Similar to (Eddy, Seifert, 1992), McCluskey deals with the investigation of the market reaction to simultaneous announcement of earnings and dividend payouts and the obtained results did not coincide with the results of the research conducted by Eddy and Seifert. McCluskey showed that in a combined announcement the earnings-related component dominates over the component of dividend amount, i.e. the dividend payout information is less strong than the signal sent to the market via the announcement of the company's earnings. Nevertheless, the results of that research do not contradict the dividend signaling theory.

One more research of the reaction of a developed capital market to dividend announcements was conducted by E. Vieira (Vieira, 2011). The author examined the stock market behavior after dividend announcements in the UK, France, and Portugal. That research showed that only in one of those three markets, namely, in UK, abnormal returns in response to the companies' dividend payout announcements were observed. According to the results obtained, the markets of France and Portugal did not react to dividend announcements, so, in these two cases, the findings did not support the hypothesis that those announcements carried any new substantial market information.

Somewhat unexpected results were presented in the paper by M. Karim (Karim, 2010). The author compared the results obtained for London Stock Exchange (LSE) and NYSE. It is worth to note, however, that the

research period (2006–2008) is partly overlapped with the time period of the global financial crisis. The results of (Karim, 2010) demonstrated that the stock returns at NYSE do not react to the dividend announcements and it occurs irrespective of whether the dividend amounts rise, fall or remain unchanged. Moreover, the results obtained for the companies traded on LSE differ from the classical dividend signaling theory. The research results showed that the market reacted negatively to increased dividend payouts, positively – to decreased dividends and neutrally – if there were no changes in dividend amounts. The author linked such discrepancies between the facts and the theory to the impact of the global financial crisis. He suggested that within the corresponding period of time US and UK faced serious economic difficulties, which to a great extent determined the investors' cautious behavior. It was stated that stocks traded on NYSE and LSE did not react to the signals sent by companies via dividend payouts and investors considered the increased dividend amounts as a sign of the companies' desire to show their solid financial standing even if it was not good enough. In other words, the increase in dividend payments by the companies was considered as the consequence of losing opportunities to invest in projects with positive net present value (NPV).

The work (Akben-Selcuk, Altiok-Yilmaz, 2010) gives an example of the research in the investigated area focused on an emerging market. The examined sample included 46 companies actively traded on Istanbul Stock Exchange within the period of time from 2005 through 2008 with the overall number of 184 announcements. The authors used the event study method and showed that the Turkish market reacted positively to the announcement of the increased dividend amounts, negatively – to the decrease in dividends and neutrally – to unchanged dividend payments. These results fully support the dividend signaling theory and contradict the Modigliani-Miller dividend irrelevance theory, according to which the company's dividend policies have no impact on the company value. The occurrence of abnormal stock returns at Turkish companies as a result of dividend announcements shows that the FCF distribution between dividend payouts to the shareholders and reinvestment has typically its effect on the total shareholder value of business in Turkey.

The paper (Mahmood et al., 2011) deals with the impact of dividend announcements on the stock price in the Pakistani market. The authors chose for analysis the period of time from 2005 through 2009. The overall number of examined announcements of cash dividend payments was up to 100. In order to evaluate normal returns, the authors used three models: market model, corrected market model with coefficient $\beta = 1$ and intercept

$\alpha = 0$, and model with constant returns. It should be noted that different models used for the approximation of normal returns gave similar results. Within the event window, the existence of average abnormal returns was determined. The researchers also found out that the highest average abnormal returns were observed on the date of the dividend announcement and on the following day. Besides, the research showed that average abnormal returns arose within the time period of $T-18$ through $T+14$ where T is the day of the examined event. The existence of abnormal returns within the event window on the days preceding the dividend announcement date is an evidence of probable insider trading, i.e. the deals by the company's insiders with confidential information on the future dividend payments who intend to make profit on the difference of the company's stock prices.

The work (Suwanna, 2012) is also dedicated to the research of the reaction of an emerging market to dividend announcements. That research was conducted on the sample of 60 Thai companies actively traded on Thailand Stock Exchange within the period of time from 2005 through 2010. The result of the research using the event study analysis method showed that, on the average, dividend announcements send a positive signal to the Thai market, i.e. they positively influence the stock returns of Thai companies irrespective of the character of announcements.

In (Mallikarjunappa, Manjunatha, 2009) the authors deal with the investigation of the reaction of the Indian emerging market to dividend announcements. The sample included 149 with the overall number of 170 announcements of dividend payouts. The authors chose the year 2002 as the period of study. Upon the analysis of the results obtained, the authors come to a conclusion that the Indian market is characterized by low efficiency. In their opinion, it is evidenced by the fact of existence of positive average abnormal returns within the event window several days after the company's dividend announcement.

When discussing the studies of the reaction of the Indian market to dividend announcements, it is also necessary to mention the work (Taneem, Ryerson, 2011). The examined sample included 82 companies representing 22 industries listed on Bombay Stock Exchange. The period for study chosen by the authors was 2004 – 2007. The authors concluded that, on the average, the market reacts positively to the increase in dividend payouts and negatively – to the decrease in dividend amounts, i.e. dividend announcements carry meaningful information and may stimulate changes in stock prices.

Another paper (Sharma, 2011) studied the impact of annual dividend announcements on the stock price behavior in India on the basis of information on 133 companies traded on Bombay Stock Exchange within the period of time from July, 1997 through December, 2007. He determined that the expected abnormal returns resulting from the market reaction to dividend announcements does not show any significant difference from zero, irrespective of the character of announcements (positive, negative or neutral). So Sharma came to the conclusion that dividend announcements do not lead to average abnormal stock returns irrespective of industries, to which companies belong. The results of research of the Indian stock market presented in (Mallikarjunappa,- Manjunatha, 2009; Taneem, Ryerson, 2011), however, do not support R. Sharma's conclusions on the reaction of the Indian market to dividend announcements. At the same time S. Mahmood determined that the Pakistani market reacts positively to the increase in dividend payments, negatively – to the decrease in dividend amounts, and neutrally – to the announcement of the unchanged level of dividend payouts.

So, the analysis of the body of prior studies of the influence of dividend announcements in emerging capital markets on the stock returns demonstrates a certain ambiguity. Some researchers come to a conclusion that the market reaction supports the dividend signaling theory while other scholars obtain the opposite results. In our opinion this fact indicates the necessity of further research in this area in order to investigate the reaction of emerging markets to dividend payout announcements. We start with the research in Indian market. The first step is to describe the specific features of dividend policies of Indian companies.

Dividend Policy of Indian Companies

India has two major stock exchanges - Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). The Indian stock market is characterized by the liquidity shift towards large family-owned corporations and towards machinery and pharmaceutical industries (National Stock Exchange…, 2013). It is a well-known fact that India is one the most important players in the global pharmaceutical market.

As it was mentioned above, India is among the world's leaders in stock market capitalization and, in this respect, India may be compared to developed countries. Over 5000 stocks are listed on BSE, however, India, like other emerging markets including Russia, is characterized by asymmetric liquidity distribution among the securities of various companies listed on the stock exchange. 500 largest companies account for about 90%

of the trading volume. All stocks traded on BSE are divided into the groups A, B, S, T, ST, and Z following the market capitalization criteria. The largest companies in terms of capitalization are included in Group A (About BSE, 2013).

It is necessary to note some features of ownership structure of Indian companies. One specific feature of that market is an important role played by family-owned conglomerates having a long history of presence in the market, which are often monopolists in their respective industries. An example of such family businesses is a tobacco company ITC Ltd. with approximately 85% of the Indian tobacco production (About ITC). Furthermore, for Indian companies, it is typical to have a large share of capital belonging to foreign institutional investors. Starting from 1991, the Indian government follows an active policy aimed at the economic liberalization, which lead to a significant increase in the amount of foreign direct investment in the Indian economy. Annual inflow of foreign investment is about $20 billion and approximately one-third of stock market deals are made with the participation of foreign institutional investors (Biswas, 2008). The active role of this category of investors and family-owned conglomerates in the Indian market has a multifaceted influence on dividend policies of Indian companies.

The most part of dividends are paid by the companies from banking sector, machinery and raw material industries. In 2011, the highest total dividend payment was announced by ONGC Ltd., an oil and gas company.

It is known that the taxation system influences the decisions on companies' dividend payouts. In India, a significant difference between the tax rates applied to capital gains and dividends. The capital gains is taxed at 10% to 20% and in the case of short-term assets the rate could be even higher – 30% - 40% (Biswas, 2008). At the same time, the dividend income is usually totally exempted from taxation. Therefore, from the taxation point of view, the dividend policy should take into account that the shareholders of Indian companies are more interested in receiving income in the form of dividends than as a gain from the sale of stocks.

Research Hypotheses and Sample

The purpose of this research is to determine the reaction of the Indian market to the companies' dividend announcements. The market reaction is examined separately for three types of announcements, namely "positive announcements" about the increased dividends, "negative" announcement informing about the dividend cut and "neutral announcements" with no changes in dividends.

The main question of the study is the following: how the dividend announcements of Indian companies influence their stock returns.

As it was mentioned above, the analysis of prior studies on Indian market demonstrated mixed results. Following the studies (Mallikarjunappa, Manjunatha, 2009; Taneem, Ryerson, 2011), one can assert that the market reaction to dividend announcements fully corresponds to their nature, i.e. the reaction is positive in case of dividend increase, reaction is negative in case of decreased dividends, and there is no market reaction to the announcements about unchanged dividend payments. However, (Sharma, 2011) suggests that dividend announcements, irrespective of their character, have no effect on stock returns of Indian companies.

In accordance with dividend signaling theory and evidence of (Mallikarjunappa, Manjunatha, 2009), (Taneem, Ryerson, 2011) we state the following hypotheses:

Hypothesis 1. Indian market will react positively to the announcements of increased, as compared to the preceding period, dividend payments.

Hypothesis 2. Indian market will react negatively to the announcements of decreased, as compared to the preceding period, dividend payments.

Hypothesis 3. Indian market will not react to the announcements of unchanged, as compared to the preceding period, dividend payments.

We use event study methodology for testing these hypotheses. The data sources were BSE and NSE official websites as well as the Indian business portal of financial information and analytics Moneycontrol (Moneycontrol, 2013).

The original sample included companies listed on BSE that regularly paid dividends. Only the companies classified as Group A according to BSE listing criteria were included in the sample. That Group A comprised of the stocks of 200 large companies with high liquidity ratios. The 2010-2012 time period was chosen in order to capture in the study the most recent tendencies and exclude the impact of the global financial crisis.

Then some companies were excluded from the original sample. The final sample did not include companies paying interim dividends, companies from financial sector, and the company that employ stock split or reverse stock split during the period in question. The activity of companies from financial sector has some specific features and is highly sensitive to

the changes in the economic environment. Financial institutions are the first to feel the consequences of crisis-related events, as well as the signs of economic growth. Therefore, the behavior and expectations of investors owning the shares of financial institutions may differ from the expectations of investors of companies from other sectors. Furthermore, banks, insurance companies, and other financial institutions must comply with reporting standards that have significant differences from the reporting standards applied by other organizations.

As a result, the final sample comprised 67 companies representing 23 industries. This allowed the industrial diversification of the examined sample. The industry classification was based on the company data presented in the related information section on the website of Indian NSE. The highest presence in the sample have machinery (16.42%), oil and gas (11.94%), and pharmaceutical (11.94%) companies. Indian economy is among the leaders in defense industry. Also the country is among the world's largest producers of pharmaceutical goods. The companies of the relevant sectors regularly pay dividends and, being highly profitable, demonstrate high dividend yields.

For each company in the sample, the relevant announcements were selected, taking into account the requirement of absence of other announcements of significant events in the event window that might influence the stock returns. For instance, on April 29, 2010 the Company Ultra Tech Cement Ltd., simultaneously with the dividend announcement, announced the acquisition of a majority stake in the ETA Star Cement Company LLC. Both announcements were substantial, but the dividend announcement dated April 29, 2010 was excluded from the research. So, all announcements that overlapped with other significant events in the event window were also excluded. Also, the dividend initiations were not considered.

Finally, 145 Indian companies' dividend announcements were included in the sample, out of which 75 announcements were on increased dividends, 32 announcements were on dividend cut, and 37 announcements stated unchanged dividend payments.

Methodology

The analysis of reaction of the Indian market to the companies' dividend announcements was conducted by the method of event study. The algorithm of this technique is described in detail in the classical work (MacKinlay, 1997), so, we do not include its description in this paper, the results of the analysis are described and discussed.

The analysis of the specific features of the Indian stock market showed that the dividend-related information appears in the market for the first time on the day of Board of Director's meeting where the decision to recommend a dividend payout to the General Meeting of Shareholders is announced (dividend announcement). So, in accordance with the corpus of event study research, we considered the date of the meeting of the Board of Directors as the event date. Neither dates of General Meetings of Shareholders nor actual dates of dividend payments to shareholders were used.

The choice of the length of the event window is made taking into account the type of the studied event, its scope and significance. The analysis of previous body of research with event study technique showed that relatively long windows are usually chosen when the event is substantial for a company and has a long-term impact, e.g. the announcement of a M&A. Generally, for a dividend announcement the event window does not exceed 41 days (20 days before and 20 days after the event) (see, e.g. (Teplova, 2008)). The analysis of previous body of research showed that the maximum event window length in case of use of day-time data was 41 days. The average window length was 21 days (10 days before and 10 days after the event). Such event window was chosen in the classical work (Aharony, Swary, 1980), in which the similar study on the US market was employed. Besides, 21-day event window was used in more recent studies (e.g. (Teplova, 2008; Capstaff et al., 2004; Joshipura, 2009; Irum et al., 2012)). So, both analyzed research papers and recommended restrictions related to the substantiality of the event determine the choice of the event window of 21 days (10 days before and 10 days after the event).

Similarly, the choice of the estimation window is based on previous research on this topic. In his work dedicated to the description of the event study analysis methodology, P. Peterson (Peterson, 1986) noted that a standard estimation window could be chosen within the range of 100 – 300 days. The analysis of academic works showed that, in fact, researchers usually chose the time interval of 100 – 250 days for the estimation window. In (Aharony, Swary, 1980), the evaluation of the parameters of the model used for the calculation of normal returns was carried out over the 120-day time period. In the research (Akbar, Baig, 2010), the length of the estimation window was also 120 days. Nevertheless, researchers sometimes use longer estimation windows. For example, in (Taneem, Ryerson, 2011), a 250-day time period was used as estimation window. In (Akben-Selcuk, Altiok-Yilmaz, 2010), the length of the estimation window is 180 days.

Based on analysis of prior studies on the topic, we decided to evaluate the parameters of normal returns in the estimation window of the medium length. Namely, the time interval of 180 days (6 months) from the moment of time $T = -190$ through the moment of time $T = -11$ was used. It is to be noted that the estimation window does not overlap with the event window, and, therefore, the possibility of influence of the studied event on the normal return evaluation is minimized.

For the normal return evaluation, the following market model was chosen

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it},$$

where R_{it} — return on the ith stock in the time moment t; R_{mt} is the market portfolio return in the time moment t; α_i и β_i — unknown model parameters to be evaluated; ε_{it} — a random value.

Traditionally, under the portfolio return the market index return is used. In this study the BSE 200 Index was used.

Estimation Results

In this section, the results of event study analysis on the sample of Indian companies are presented. First, we conducted the analysis of market reaction to dividend increase announcements. In Figures 1 and 2 the Average Abnormal Return (AAR) and the Cumulative Average Abnormal Return (CAAR) graphs are shown within the event window (Fig. 1, Fig. 2).

The testing of the Hypothesis 1 showed that the AAR has a significant difference from zero on the days $t = 2$ and $t = 8$ at the significance level of 5%. At the significance level of 10%, the AAR has a significant difference from zero on the day of the announcement $t = 0$ and on the day $t = 10$. Furthermore, on the days when the significant difference from zero was confirmed, the AAR values are positive, which demonstrates the positive reaction of the Indian stock market to the announcements of increased dividends. On the graph of abnormal returns, one can see a sharp increase in this value on the day of the increase announcement and on the second day after it. Fig. 2 clearly shows the tendency to the increase in the CAAR. It is necessary to note that the change of the CAAR sign from negative to positive occurs just on the day of the event ($t = 0$). By the 21st day of the event window, CAAR reaches the value of +0,833%.

Figure 1. The Average Abnormal Return (AAR) in the event window ("good news")

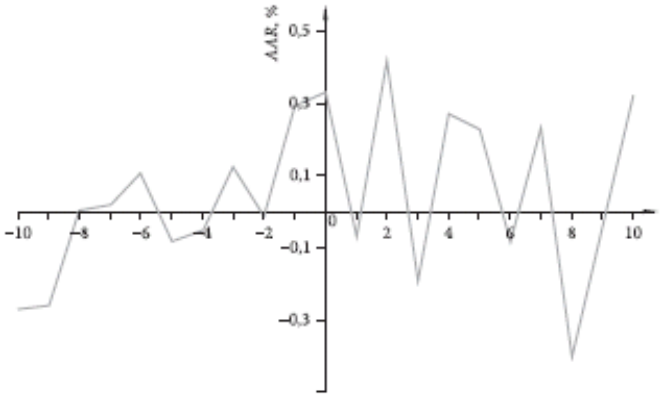
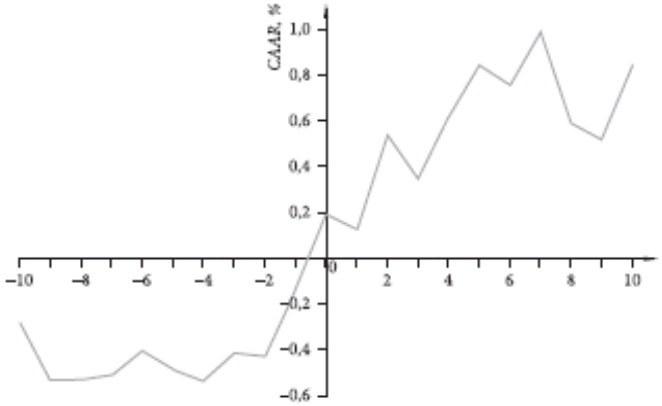


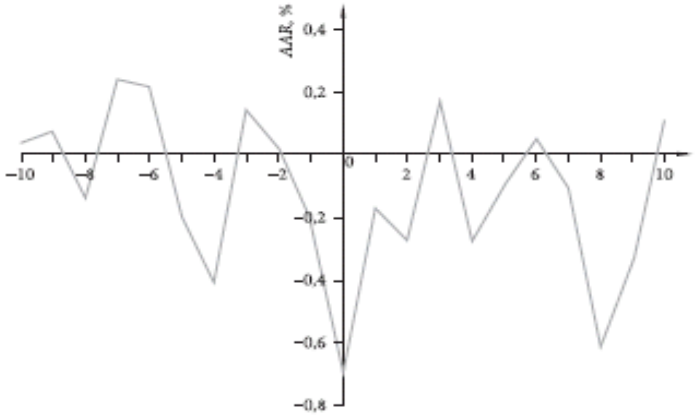
Figure 2. The Cumulative Average Abnormal Return (CAAR) in the event window ("good news")



All the above arguments allow us to accept the Hypothesis 1, stated that on average the Indian market reacts positively to announcements of increased dividends. This result supports the dividend signaling theory. Similar results were obtained in (Mallikarjunappa, Manjunatha, 2009) where the hypothesis that the announcements about increased dividends amounts have a positive influence on the Indian companies' stock returns was supported. Moreover, the result of this research supports the conclusions of (Taneem, Ryerson, 2011) drawn from the research of the reaction of the Indian market to dividend announcements.

Now we move on to the results for the dividend decrease announcements. Figures 3-4 illustrate the dynamics of the AAR and CAAR values in the event window.

Figure 3. The Average Abnormal Return (AAR) in the event window ("bad news")



The testing of the Hypothesis 2 showed that at the significance level of 10% the AAR has a significant difference from zero on the day of the announcement $t = 0$ and on the day $t = 8$. The abnormal return values on those days are negative. It means that, on the basis of the research conducted on the sample of 67 Indian companies, the conclusion can be drawn that the announcement of dividend cut negatively affects the stock returns. The CAAR graph (see Fig. 4) clearly demonstrates the downward tendency within the event window.

On the day of the announcement, a sharp decline in the CAAR occurs, then CAAR continues to decrease down to the value of 2.458%. Fig. 3 demonstrates that AAR value gets its minimum within the event window exactly on the day of the announcement. So we may state that dividend cut announcements carry negative information to the Indian market and create negative abnormal stock returns of Indian companies. This finding supports the dividend signaling theory. Similar results were obtained in the above-mentioned papers (Taneem, Ryerson, 2011; Mallikarjunappa, Manjunatha, 2009).

It should be noted that one of the features of dividend policy of Indian companies is the payment of dividends as a percentage of the nominal value of shares. As a result, Indian companies often announce unchanged dividend as a percentage of the nominal value of shares. This feature allowed us to analyze the impact of such announcements on stock returns. According to our results the corresponding AAR value has no significant difference from zero on each day of the event window. Fig. 5 and 6 show the behavior of the AAR and the CAAR in the event window.

Figure 4. The Cumulative Average Abnormal Return (CAAR) in the event window (“bad news”)

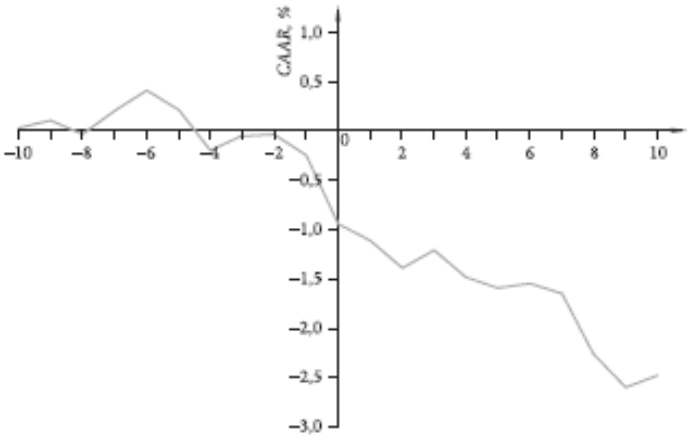
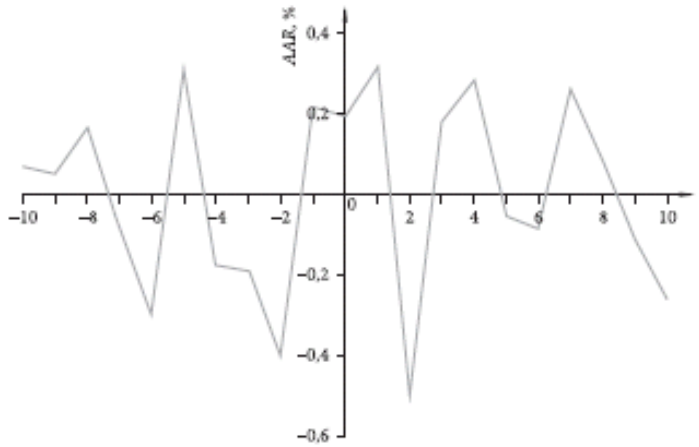


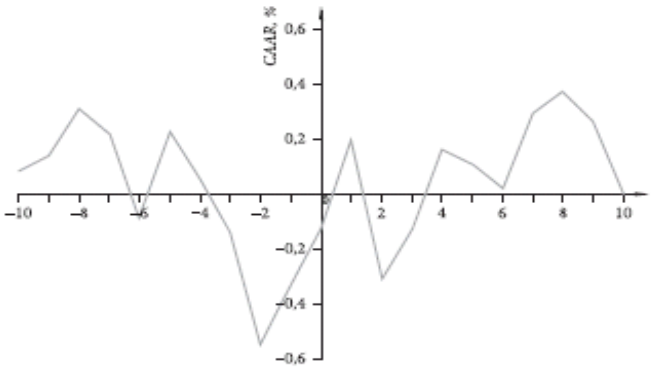
Figure 5. The Average Abnormal Return (AAR) in the event window (“neutral news”)



From Fig. 5 we can see that CAAR fluctuates around the zero level and no clear upward or downward tendency in the event window can be observed. This can be explained by supposing that the announcement of unchanged dividend amounts, on the average, does not create any abnormal returns on the stock of Indian companies and is perceived as a neutral signal by the market. The owners of the stocks with unchanged dividends in the event window receive only normal returns. It corresponds to the dividend signaling theory, according to which the company’s announcements about

unchanged dividends do not carry significant market information that could create abnormal returns on the given company's stock. These results also correspond to the results of the previous research (Taneem, Ryerson, 2011; Mallikarjunappa, Manjunatha, 2009). Furthermore, similar conclusions were stated in (Aharony, Swary, 1980) for NYSE, in (Vieira, 2011) for LSE, in (Kurniasih, Siregar, 2011) for Indonesian Stock Exchange, in (Dasilas, Leventis, 2011) for the Greek market etc.

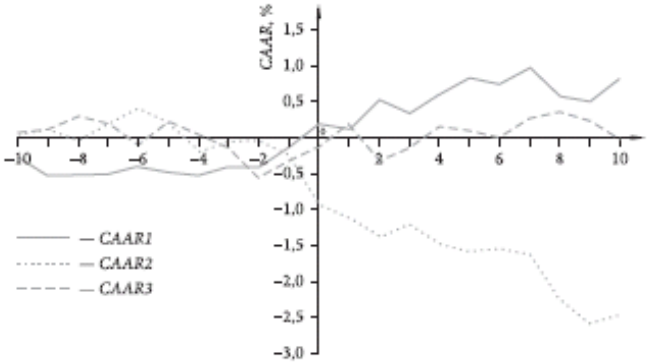
Figure 6. The Cumulative Average Abnormal Return (CAAR) in event window ("neutral news")



Therefore, the hypotheses 3 can be accepted.

Figure 7 represents CAAR corresponding to each type of announcement.

Figure 7. Cumulative Average Abnormal Return in the event window



The following abbreviations are used on Fig. 7: CAAR1 — Cumulative Average Abnormal Return in case of the announcement of increased dividends; CAAR2 — Cumulative Average Abnormal Return in case of the announcement of decreased dividends; CAAR3 — Cumulative

Average Abnormal Return in case of the announcement of unchanged dividends.

The analysis of the CAAR graphs shows that the absolute value of the cumulative return in case of a "bad news" is three times higher than for a "good news": –2.46% and +0.83% respectively. In other words, the negative market reaction to the announcements of decreased dividends is more explicit than the positive reaction to the announcement of dividend increase.

So, our study on the sample of 67 Indian companies from 23 industries gives the following results:

- increased dividend announcements by Indian companies create, on average, positive abnormal returns on the stocks of the relevant companies;
- decreased dividend announcements by Indian companies create, on average, negative abnormal returns on the stocks of the relevant companies;
- announcements of unchanged dividends by Indian companies do not create, on average, any abnormal returns on the stocks of the relevant companies.

Thus our study on a sample of Indian companies supported the dividend signaling theory. As the announcements of dividend changes cause, on average, significant changes in stock returns we may suppose that in order to maximize the shareholder value, Indian companies in their dividend policies should take into account the potential reaction of the stock market to the dividend announcements.

Conclusion

This study took into account specific features of Indian market, as well as dividend policies and ownership structures of Indian companies.

The existing body of research and practice of the financial market show that an unexpected significant corporate event can influence the stock prices as soon as the information about such event becomes open to market participants. The influence can be either positive or negative in terms of changes in stock prices and stock returns. This study demonstrates that dividend announcements of Indian companies represent the significant news and create abnormal stock returns within the event window. Therefore, to maximize the shareholder value, Indian companies when developing the dividend policies should take into account the reaction of the stock market to dividend announcements.

The positive reaction of the Indian market to the increase in dividend payments can be discussed as follows. The Indian market is characterized by a significant presence of foreign institutional investors in the ownership structure of companies. At present, foreign institutional investors account for about 28% deals in stocks traded in the Indian market. Institutional investors are interested in high dividend payments to strengthen, in turn, capital market control over the top-managers' activities [Short et al., 2002]. One can suppose that, along with other factors, this specifics causes a positive perception by the Indian stock market of the announcements of increased dividend payouts, and a negative perception of the announcements of a dividend decrease.

At the same time, the feature of Indian market is the presence of numerous large mature companies, which are family-owned conglomerates with a stable incomes. Such companies are considered as "money cows" by Indian investors. This approach corresponds to the concept of firm maturity (Grullon et al., 2002). According to that concept, the decrease in dividends is negatively perceived by the shareholders of the Indian companies because it could result in excessive investments in projects generating private benefits for top-managers. Also, the identified positive impact of announcements of increased dividends is probably associated with the optimistic signal of increased dividend payments. By doing so, company managers demonstrate their optimistic expectations concerning the company's perspectives and their confidence regarding the future earnings. To the contrary, the announcements of decreased dividends represents a negative signal for the Indian market players because such announcements could be interpreted by investors as a sign of the company's financial difficulties and decrease in profitability.

The absence of abnormal stock returns in the situation of "neutral" signals is probably caused by the fact that, in investors' opinion, the unchanged dividend payments are an evidence of sustainable position of a company. Consequently, the actual stock returns do not differ significantly from the estimations obtained using the market model.

The positive reaction of the Indian market to the increased dividends announcements could also stem from a substantial difference in taxation of capital gains and dividend payments. As it was mentioned above, the capital gains' tax rate may reach 40% while dividends are usually exempted from taxation. In these circumstances, investors prefer dividends in accordance with the tax differentiation theory.

Therefore, one can make a conclusion that the reaction of the Indian

market to dividend announcements corresponds to the type of announcement ("good" news, "bad" news, "neutral" news). For example, in 2010, the stock price of Indian company Tata Steel Ltd. rose by 7% after the announcement of dividend increase. Bloomberg's financial analytics associate that price increase just with the positive contents of the dividend announcement. At the same time, it worth to be noted that Tata Steel Ltd. is a member of Tata Group, which is a large family-owned conglomerate and has a long history. Also there is a significant presence of foreign institutional investors in its ownership structure: these investors own about 21% of the Group's share capital. Such characteristics of Tata Steel Ltd. support our suggestion that the positive reaction of the Indian market could be explained, first, by the fact that investors consider large Indian family-owned conglomerates as "money cows" and, second, by the fact that foreign institutional investors with significant presence in Indian companies are interested in high dividend payouts. Indeed, the stock prices of the company Tata Motors Ltd., which is also part of the family conglomerate Tata Group, fell by 9% in 2010 after the decreased dividends announcement.

On the basis of the results obtained in the study, in view of the sample and time period characteristics, we can suppose that Indian companies should follow the policy of increasing dividend payments because decrease in dividends as compared to the preceding year is negatively perceived by investors. If a company cannot increase dividends, it looks useful to ensure unchanged dividend payments. This recommendation is advocated by our findings showing that, on the average, dividend cut announcements by Indian companies cause the decrease in stock returns while the announcements of unchanged dividends are neutrally perceived by the market. Of course, companies should reasonably limit dividend increase allowing the company to keep its competitive advantages. Of course, the management of any company should take into account a number of external and specific internal factors when making decision on dividend payouts. At the same time, the results of this study and previous body of research devoted to testing the dividend signaling theory show that the reaction of the stock market to the company's dividend announcements is among the most important factors to be taken into account in the process of decision-making concerning FCF distribution and dividend payout ratio. The value of a company is created and supported in the stock market. Dividend policy aimed at satisfaction of the shareholders' needs has a positive effect on the company's value in the long run.

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